



ARLINGTON COUNTY, VIRGINIA

County Board Agenda Item Meeting of July 19, 2008

DATE: July 15, 2008

SUBJECT: Amendments to the County Comprehensive Plan to Adopt a Bicycle Element, dated July 2008 to the Amended Master Transportation Plan (MTP), and to Repeal the 1994 Bicycle Transportation Plan.

C. M. RECOMMENDATION:

Amend the County Comprehensive Plan by a) adopting a document entitled "Master Transportation Plan Bicycle Element", dated July 2008, to the Amended MTP, as defined in Attachment A to this Board Report; and b) repealing the 1994 Bicycle Transportation Plan. The July 2008 document includes two changes, on pages 4 and 31, to the advertised document.

ISSUES: Among many recommendations the Bicycle Element includes the following actions: the continued expansion of Arlington's bikeway system including the construction of new or widened trails within parkland; the dedication of additional roadway space to bicycle lanes even when that space is reallocated from general-purpose travel and parking lanes; exploration of whether the Zoning Ordinance can be amended to require bicycle parking to be provided by all development including those built by-right; and, the adoption of a goal of having at least half of all residents use a bicycle for transportation on at least an occasional basis.

SUMMARY: The proposed Bicycle Element establishes a plan to advance bicycling in Arlington as a means to achieve the MTP goals of providing high-quality transportation services, provide more transportation choices and promote equity. The Bicycle Element focuses primarily upon improving bicycle accommodations and safety on the network of streets and trails that constitute the Arlington's bicycling environment. However, the Bicycle Element also recognizes that advancements must be made in the areas of education, enforcement and encouragement in order to achieve greater safety and bicycling participation rates.

BACKGROUND: In 1941, Arlington adopted its first long-range, countywide transportation plan: Major Thoroughfares for Arlington, Virginia. Approximately 20 years later, a new thoroughfare plan was adopted, this time in concert with Arlington's General Land Use Plan. Thereafter, in the mid-1970s, Arlington's long-range transportation plan became multimodal, with four elements adopted for bikeways, streets, transit and walkways. Ten years later, a new

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Countywide plan was developed, bringing together the streets, bikeways and walkways into one document. That was approximately 22 years ago, and since then a new element was adopted for paratransit, and the portions of the 1986 plan for bikeways (now, bicycling) and walkways (now, pedestrians) have been updated.

In October 2004, the Arlington County Board tasked County staff to undertake a complete revision of the County's MTP. The public process was initiated with a community-transportation survey that generated responses from about 800 Arlington residents and a series of focus-group and public-forum sessions held in the fall of 2005. The information collected from the community was presented to the 24-member MTP Plenary Group which was comprised of representatives from several County advisory commissions, local partnerships, the Arlington Civic Federation and other community organizations. Over the course of a year-and-a-half of regular meetings, the MTP Plenary Group assisted the County staff and a consultant team with the development of the first draft of a new MTP. Three drafts of the proposed MTP revisions were presented for public review between June 2006 and March 2007 at public forums, on the County's website and through more than 50 presentations made to advisory committees and civic groups. The drafts also included extensive input from the County's Bicycle Advisory Committee. In late 2007, the County Board decided to split adoption of the revised MTP into two general phases with the adoption of the overall goals, policies and map portions to occur first and adoption of the six modal element document to occur during 2008.

In November and December of 2007, the County Board amended the MTP to adopt a Goals and Policies document and a MTP Map (known collectively as the "MTP Additions"). The new documents provided updated vision, objectives, goals and policies for the future of the Arlington transportation system, as well as identified key planned transportation facility and service additions including new streets, transit lines, intersection and roadway improvements, and bicycle/pedestrian trails. The two new documents were added to the five previously adopted MTP documents, including all subsequent supplements and amendments thereto:

- Master Transit Plan (adopted in 1976)
- Master Transportation Plan – Part I (1986)
- Paratransit Element (1989)
- Bicycle Transportation Plan (1994)
- Pedestrian Transportation Plan (1997)

The MTP Additions plus the previously adopted MTP documents (known as the Existing MTP) now comprise the Amended MTP. (see Attachment A to this report for definitions of other terms used herein.) The Bicycle Element is one of six supplemental modal element documents (consisting of Transit, Streets, Pedestrian, Bicycle, Transportation Demand and Systems Management, and Parking and Curbspace Management) that are intended to be adopted by the County Board, replacing the previously adopted corresponding MTP documents. In 2008, the proposed Bicycle Element and five other modal documents are to be adopted and replace the MTP documents. The proposed Bicycle Element would replace the Bicycle Transportation Plan as adopted in 1994 and subsequently amended on several occasions.

The draft Bicycle Element was reviewed by the Parks and Recreation Commission on May 20th as well as by the Transportation Commission and the Planning Commission resulting in changes that were incorporated into the advertised draft of the Bicycle Element. Comments on the draft plan have also been submitted by the Urban Forestry Commission, Environment and Energy Conservation Commission and the Bicycle Advisory Committee. At its meeting of June 17th (recessed session of June 24th) the County Board authorized advertisement for hearings by the Planning Commission at its July 14th meeting, and by the County Board at its July 19th meeting (July 22nd recessed session.)

DISCUSSION: As part of the General Land Use Plan/Comprehensive Plan, the MTP is Arlington’s principal means of establishing planning policy for transportation matters. The MTP Additions were developed to incorporate the transportation policy directives established by the County Board in recent years. Moreover, the MTP Additions guide the implementation of a multimodal transportation system that will serve the future Arlington as envisioned by the County’s General Land Use Plan (GLUP). By the year 2030 Arlington’s residential and employment populations are forecasted to grow about 30%. Arlington will experience increased travel demands not only from its growth, but also from greater amounts of pass-through travel.

The adopted MTP Goals and Policies summary established nine primary bicycle-related policies for Arlington. Likewise, the adopted MTP Map identified 13 key bicycle and pedestrian facilities to be added to the County system. The proposed Bicycle Element identifies how best to realize the County’s bicycle-related goals and to implement the bicycle-related policies and key bikeway facilities. The proposed Bicycle Element groups the policy statements into five categorical areas:

- completion of the Bikeway Network,
- increasing bicycle use,
- improving bicycle safety,
- managing the bikeway system, and
- integrating bicycling with other transportation modes.

Overall the Bicycle Element identifies a total of 47 actions to be undertaken to implement the County’s bicycle policies.

A primary objective of the Bicycle Element is to provide a plan for the completion of the Bikeway Network. Arlington’s existing network of on- and off-street bicycle facilities would be upgraded and expanded to increase the connectivity of the system thereby providing more direct high-quality cycling routes across the County and to attractions in adjacent communities. Many of the most critical bikeway additions are those to close gaps in the existing system by bridging barriers such as highways, waterways and large land holdings. A total of 94 new projects are identified that would add approximately 57 miles of new bikeways to Arlington’s existing 113-mile system. In addition to trails, bike lanes and bicycle routes, the new projects include two types of facilities – the bicycle boulevard and shared-lane symbols (or “sharrows”) - that currently are not commonly used in Arlington. A significant increase in the amount and quality of bicycle parking placed throughout the County also will support the large public investment in bikeways.

Another of the primary objectives of the Bicycle Element is to explicitly establish an Arlington cycling culture that embraces bicycle use as a mainstream travel mode. The plan seeks to achieve having at least 50% of Arlingtonians using bicycles for transportation purposes on at least an occasional basis. Apart from the planned improvements to bicycle facilities, it is the expansion of bicycling-promotion programs and improvements to bicycling safety that are intended to bring about increased bicycle use and general community support for cycling. A large number of the implementation actions in the Bicycle Element are directed at improving bicycle visibility and at increasing education and law enforcement related to improved safety for bicyclists.

The other three primary objectives of the proposed Bicycle Element are improving bicycle safety, managing the bikeway system and integrating bicycling with other transportation modes. Safety, or the perceived lack of safety for cyclists, is one of the most commonly cited reasons why Arlingtonians do not bicycle more often. While bicycling fatalities and serious injuries occur very infrequently in Arlington, the plan places great emphasis on the implementation of physical measures that make bicycling safer and education and traffic enforcement actions that can reduce conflicts between bicyclists and other street and trail users. The Bicycle Element calls for an expansion of current safety-education programs with increased outreach to groups of cyclists who may be at most risk for injury.

One of the stronger concerns expressed in regards to management of the trail system is safe interaction amongst trail users. Arlington will need to conduct proper physical maintenance as well as user management to insure that the trails are safe for all users, particularly as our population and trail use increase over time. The Bicycle Element focuses on conducting regular maintenance of both on- and off-street bikeways. Projects are also proposed to upgrade bikeways including the addition of special markings, signage, traffic-signal modifications and selected trail widening.

In addition to upgrading bicycling facilities themselves, better bicycle access is proposed to and from transit service to improve bicyclist mobility. The Bicycle Element calls for improving bicycle parking at Metro stations and other transit stops as well as providing more opportunities to bring bicycles onboard transit vehicles including regional commuter-rail service. Inter-modal transportation will also be advanced through the establishment of a bike-sharing program that would allow short-term rental of bicycles at many locations throughout the County.

Issues:

Expansion of the Bikeways Network: Arlington's bikeways network currently consists of approximately 113 miles of designated bikeways, comprised of 46 miles of off-street shared-use trails, 24 miles of bicycle lanes, and 43 miles of signed on-street bicycle routes. The network serves nearly all the County, yet there are areas that lack the highest-quality facilities (namely the trails and bike lanes) and several significant missing sections that limit the continuity and usefulness of the network. Moreover, certain highways (I-395, George Washington Memorial Parkway, Arlington Boulevard, and Washington Boulevard) and large property holdings (the Pentagon, Arlington Cemetery, Fort Myer and the two county clubs) act as barriers to some cross-county bicycle trips.

The plan proposes 94 new bikeway projects that would substantially improve the connectivity of the entire network through establishment of new links particularly around or across the existing barriers. The most expensive and difficult of the projects to implement would be the new or enhanced multi-use trails. Several of the projects would be built within or across County or National park properties. Some concern has been raised about the potential environmental damage that could occur from the additional impervious surface area resulting from the projects. Projects that significantly increase impervious surface area would warrant the County's and, for some projects, potentially a Federal environmental review. The negative effects of the trail paving might be offset by reductions in driving.

Reallocation of Roadway Space: The Bicycle Element includes projects to add about 21 miles of new bicycle lanes and about 14 miles of marked, shared-use lanes (known as "sharrows") to arterial streets in Arlington. (See Appendix B and the map on page 13 for details.) Unlike bicycle lanes which are for the exclusive use of bicycles, sharrows will be for shared use as noted above. In nearly all of the projects the new bikeway space would be obtained by reallocating space from the existing roadway travel and parking lanes, and usually by reducing the width of the travel and parking lanes but not the actual number of lanes. Safety and capacity of all travel modes would not be sacrificed. However, in six projects, bike lanes would be created through the conversion of some sections of lower-volume four-lane roadway into two- or three-lane roadways, or through the elimination of a lightly-utilized parking lane. Those projects are proposed to include about 3.4 miles of lane reductions on Kirkwood Road, Wilson Boulevard, and North Sycamore/Roosevelt streets. Parking-lane reductions would occur on about two miles of sections of North Carlin Springs Road, South Eads Street and 10th Street North.

In recent years, the County has created about 23 miles of bicycle lanes on Arlington arterial streets. The majority of those projects have involved reallocation of roadway from wide travel lanes. However, on several roadways, notably South Eads Street, Pershing Drive, Military Road, Williamsburg Boulevard, Kirkwood Road, North Barton Street and Nelly Custis Drive, the number of travel lanes have been reduced from four to two lanes. In the several years since the conversions took place, there have not been noticeable increases in traffic congestion or reductions in travel safety on those roadways. As of yet, the County has not undertaken a bicycle-lane project that has required the elimination of on-street parking. Parking along North Carlin Springs Road, between George Mason Drive and Park Drive is very lightly used, but parking on Eads and 10th Streets is more heavily used and measures would need to be made to preserve as many spaces as possible.

Zoning Ordinance: Currently, the Arlington County Zoning Ordinance does not specify a bicycle-parking requirement for buildings and many building owners have not chosen to provide any bicycle parking. While the County has made the provision of bicycle parking a standard condition for new site-plan developments, it has not required bicycle parking as part of development that is by-right. The County also does not have the right to install public bicycle parking on private property unless an easement has specifically been granted for that purpose. The best means to ensure that bicycle parking is provided at all buildings in the County is to include bicycle parking in the same section of the Arlington Zoning Ordinance that now requires

automobile parking with all development. Such a revision to the Arlington Zoning Ordinance likely requires adoption of State authorizing legislation. As bicycle parking is inexpensive and utilizes relatively little site area, the requirement is not expected to impose a significant burden on new or renovated buildings.

Bicycling Use Objective: The draft Bicycle Element establishes a goal of having at least half of all Arlingtonians use a bicycle at least occasionally for transportation purposes. The intent of the element is to establish a local culture in which most people see and use bicycles as a normal form of transportation. Figures on the use of bicycles in Arlington are currently limited; however, 38 percent of the respondents to the transportation survey, conducted at the beginning of the MTP development process, identified themselves as being at least occasional users of bicycles for transportation.

Some residents have identified the proposed usage objective as being too high and unrealistic for an American city municipality. County staff believes that the objective is achievable given all the physical improvements and encouragement actions that are proposed in the plan. Moreover, other factors such as rising gasoline costs and greenhouse gas reduction measures will likely have greater influence upon personal travel in the near future and should further increase bicycling use.

Impacts on Trees, Park Land and the Environment: At several meetings of advisory commissions, concern was raised about how trail projects could have adverse impacts, and about high-speed bicycling would adversely affect other trail users. Specifically, there has been concern about the potential impact of planned widening of several major trails and the use of national design guidance in the design of local trails. Two changes to the advertised plan are recommended, as described below.

The draft plan has been revised to specify that new bikeway projects undergo the County's environmental-review process earlier in their design process and that larger curve radii be used on trails only as warranted. Both revisions should be helpful in ensuring that important trees and park lands are preserved when new bikeway projects are built. Staff believes that the plan should continue to state that the appropriate national guidelines (AASHTO) should be used in our trail design. The local trails that have been built to AASHTO standards have proven to be more comfortable and safer for bicycle and pedestrian users. County staff will use discretion in applying the guidance to preserve the natural environment as much as possible while still maintaining the highest possible degree of public safety.

COMMUNITY REVIEW:

The Transportation Commission considered the Bicycle Element at its July 10th meeting and voted unanimously to support its adoption. At the meeting, the Commission considered comments raised by speakers regarding potential impacts of trail-widening projects upon trees, park land and the natural environment. Comments also were addressed as to the appropriateness of Arlington using national design standards that are perceived to favor higher-speed cycling on

trails. The Commission recommended two changes to the draft plan: to direct that projects undergo the County's environmental-review process early in the design stage, and to use discretion in applying national design guidance.

The Planning Commission, at its July 14, 2008 carryover meeting, also voted unanimously to support the proposed amendment to the County Comprehensive Plan that would adopt the May 2008 Bicycle Element and repeal the 1994 Bicycle Transportation Plan. The Commission considered the comments expressed by several other County commissions and advisory committees regarding the plan and supported adoption of the May 2008 draft without any specific changes. Commission members expressed support for more intensive efforts to construct the bikeways network and to enhance education of the entire Arlington community about bicycle rights and responsibilities on the streets. Commissioners also instructed staff to use discretion in designing new bikeways to be gentler to the environment.

Based upon the recommendations expressed by the advisory commissions and Arlington citizens, County staff proposes two revisions to the May 2008 Bicycle Element draft that was authorized for advertisement. Those revisions are:

- Page 4 – Modify Implementation Action e. of Policy 11 to specify that new and renovated shared-use trail projects should undergo County environmental review early in their design stage.
- Page 31- Add the clause “where warranted” to the guidance that the minimum trail curve radii should be 100 feet.

FISCAL IMPACT: Adopting the amendments to the Existing Plan by adding thereto the proposed Bicycle Element will impose no immediate financial commitments from the County. However, many of the proposed implementation actions in the Bicycle Element call for significant financial investments for the construction, operation and maintenance of bicycle transportation facilities and services. Implementation of the MTP will require the County to determine to what extent, to which purposes and on what schedule it will commit its own revenues as well as those non-local funds that it may control. Such decisions will be made by the Arlington County Board as part of future operating and capital budget deliberations.

Attachment A: Master Transportation Plan (MTP) Terminology to Board Report for July 19, 2008 County Board Meeting.

Name:

Consists of:

Existing MTP

- Master Transit Plan (adopted in 1976),
- Master Transportation Plan – Part I (1986),
- Paratransit Element (1989),
- Bicycle Transportation Plan (1994),
- Pedestrian Transportation Plan (1997), and
- All supplements and amendments since they were adopted by the County Board as reflected in the five-year updates, or otherwise.

MTP Additions

- MTP Goals and Policies Summary, adopted November 2007
- MTP Map, adopted December 2007

Amended MTP

- *Existing MTP* and the *MTP Additions*

The *MTP Additions* will have precedence in instances of conflicts or inconsistencies with the *Existing MTP*.

Future MTP

- *MTP Additions* and the proposed future plan elements:
 - Bicycle Element
 - Pedestrian Element
 - Transportation Demand and Systems Management Element
 - Transit Element
 - Parking and Curbspace Management Element
 - Streets Element